

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number
WO 2005/051446 A1

(51) International Patent Classification⁷: **A61L 27/42**,
27/20, 27/38

(21) International Application Number:
PCT/EP2004/053129

(22) International Filing Date:
26 November 2004 (26.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PD2003A000286
27 November 2003 (27.11.2003) IT

(71) Applicant (for all designated States except US): **FIDIA
ADVANCED BIOPOLYMERS S.R.L.** [IT/IT]; Via Ponte
della Fabbrica, 3/B, I-35031 Abano Terme (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **PASTORELLO,
Andrea** [IT/IT]; Via A. Volta, 3, I-35031 Abano Terme
(IT). **PRESSATO, Daniele** [IT/IT]; Via S. Rita, 19,
I-35036 Montegrotto Terme (IT).

(74) Agents: **GERVASI, Gemma** et al.; Notarbartolo & Ger-
vasi S.p.A., Corso di Porta Vittoria 9, I-20122 Milan (IT).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

Published:

— with international search report
— before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: COMPOSITE STRUCTURES CONTAINING HYALURONIC ACID THE DERIVATIVES THEREOF AS NEW BONE
SUBSTITUTES AND GRAFTS

(57) Abstract: A composite material comprising: (i) hyaluronic acid and/or hyaluronic acid derivatives, (ii) demineralised bone
and/or biocompatible partially or totally demineralised bone tissue matrix and/or biocompatible and bioresorbable ceramic materials.
This material preferably associated with at least one layer comprising a hyaluronic acid derivative may be used in the preparation of
bone substitutes or grafts for the regeneration or formation of bone tissue in surgery.



WO 2005/051446 A1